

**DETAILED ACTION**

***Response to Amendment***

1. In the reply filed August 26, 2009 the applicant has amended claims 1, 11, 13 and 14, cancelled claims 3 and 4 and added claim 18. The previous rejection is hereby withdrawn in favor of the new rejection found below.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 10 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 10 is indefinite. It depends off a cancelled claim 3, therefore this claim is indefinite. This claim will be interpreted that it will depend off claim 1, since other claims that depended of the canceled claims now depend of claim 1.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-2 and 5-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAKANSSON (International Publication Number WO 92/16314, hereafter '314), in view of Ripley (U.S. Patent 6,383,371, hereafter '371), and Caroli (U.S. Patent 6,228,180,**

**hereafter '180) and of Hakansson (European Publication Number 0 309 432 A2, hereafter '432).**

6. Claim 1: '314 teaches a device (Fig. 1) for purification of machine parts contaminated by oil and grease [Title; Abstract; Figs. 1-2; page 5, lines 21-24], comprising:

a purification housing (1) which can be locked with a lid (2 is a lid that opens and closes so as to seal the washing chamber. For a lid to stay closed and seal a machine that has movable parts, the lid has to be obviously locked), in which a support member (1 and 3 provide a system to hold objects) for receiving the a fluid provided in the housing acts upon the parts to be purified which are provided on the support (the nozzle system sprays liquid in 1 upon the parts) and a bioreactor (14) for treating the purifying fluid (14 treats the composition of the purifying liquid), where the purifying fluid is provided in a closed circuit via a discharge line (10, 17 and 18) and a supply line (15) between the purification housing and the bioreactor [Abstract; page 5, line 21 – page 6, line 24; page 7, lines 1-25],

a valve (18 is located between the blowing system and the purification housing), which valve is opened for the purifying fluid only at the temperature level of the bioreactor [Fig. 1; page 9, lines 1-8].

It does not teach the support member being a basket, a heat exchanger and its location on the discharge line and the valve being located between heat exchanger and the bioreactor. However, '180 teaches a washing machine for washing items having support member in the form of a basket (16) to support items during washing [Title; Abstract; Figs. 1-2; col. 2, lines 7-14]. Therefore, one of ordinary skill in the art at the time the invention was made would have substituted the support member of '314 with the basket of '180 to held items to be washed. '180

does not teach a heat exchanger. However, '371 teaches a wastewater treatment apparatus that uses bacteria to treat contaminants in the wastewater, the apparatus having a conduit discharge and feed system wherein a heat exchanger (83) is located in the discharge line (81-88) which is capable of heating or cooling the fluid passing through the conduits [Title; Abstract; Fig. 1; col. 4, lines 4-11; col. 2, lines 15-29]. Therefore, one of ordinary skill in the art at the time the invention was made would have placed the heat exchanger of '371 in the discharge line of '314 to have treated the condition of the purifying liquid that carries the bacteria from the washing apparatus to the bio reactor. As for the matter of rearranging the valve and heat exchanger along the discharge line, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have rearranged the valve (18 in '314) and the heat exchanger to have been placed in the matter the limitation is claimed, since it has been held that rearranging parts of an invention involves only routine skill in the art – *In re Japikse*, 86 USPQ 70. This rearrangement would allow the valve to open/close access for the fluid to the bioreactor based on an operator's choice. Additionally, having the valve located after the heat exchanger would give an operator the choice of how long to keep the fluid in the heat exchanger to be cooled or heated before creating a flow path by opening the valve.

'314 teaches a bioreactor, having bacteria, attached to washing device operating under a controlled temperature environment [see citations above]. It does not teach the temperature range of the bioreactor being between 35°C to 40°C. However, '432 teaches an apparatus for cleaning objects using bacteria to biodegrade the hydrocarbons, wherein the preferred tank temperature is 35°C to 40°C for maintaining bacteria population [Title; Abstract; page 10, lines 33-46]. Therefore, one of ordinary skill in the art at the time the invention was made would have run the

bioreactor of '314 at a temperature range of 35°C to 40° to have maintained the bacteria population.

'314 teaches a washing device having purifying fluid at a temperature of about 70°C [see citations above. Also, see page 3, line 36 – page 4, line 2]. It does not teach the temperature range being between 50°C to 80°C. However, '432 teaches the apparatus for cleaning objects uses purifying fluid having a temperature of 50°C to 90°C to dissolve and emulsify oil and contaminants [Title; Abstract; page 11, lines 53-56]. Therefore, one of ordinary skill in the art at the time the invention was made would have set the temperature of the purifying fluid of '314 between 50°C to 80°C to have dissolved and emulsified oil and contaminants.

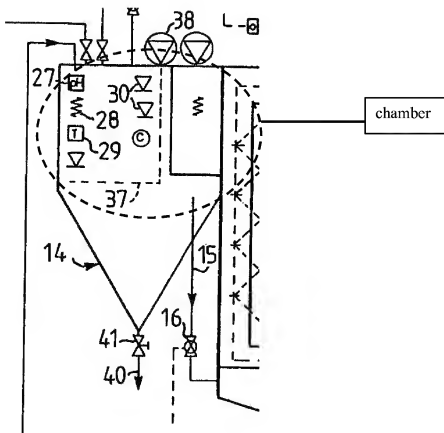
Claims directed to apparatus must be distinguished from prior art in terms of structure rather than function. *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA). “[A]pparatus claims cover what a device is not what a device does” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990).

7. Claim 2: '314 teaches all the limitations of claim 1 above. It further teaches a pump (11) which circulates the purifying fluid is provided between the valve (18) and the housing (1) [Fig. 1; page 6, lines 5-13]. It does not teach the pump located between the heat exchanger and the valve. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have placed the pump (11) between the heat exchanger and the valve, since it has been that rearranging parts of an invention involves only routine skill in the art – *In re Japikse*, 86 USPQ 70. This rearrangement would allow the pump to provide flow pressure for the fluid to the bioreactor based on an operator's choice. Additionally, having the pump located after the

heat exchanger would give an operator the choice of how long to keep the fluid in the heat exchanger to be cooled or heated before creating a flow pressure by activating the pump.

8. Claims 5 and 9: '314 teaches the bioreactor having an air throughput to favor the bacteria [Fig. 1; page 9, lines 1-8].

9. Claim 6: '314 teaches in an upper area of the bioreactor a chamber (see figure below) is located in order to receive the treated purifying liquid [Fig 1 shows supply line 15 directed from the top, i.e. upper chamber, of the bioreactor to device 1].



10. Claim 7: '314 teaches all the limitations of claim 7 above. It further teaches the chamber is connected to the supply line 15 which is connected to the spray nozzle system (the supply line is

connected to the nozzle via 9, 10, 12, 6, and 5, which ejects the liquid through nozzle 8) [Abstract; page 5, line 21 – page 6, line 24; page 7, lines 1-25].

11. Claims 8, 12, 15-17: '314 teaches a control arrangement (13, 16, 18, 21, 23, 36, 46, 51, 29, 43, and 7) controls the heat exchanger, the pump system, the valves, as well as the pump system for supplying air to the bioreactor [the control arrangement are all interconnected one way or another to run the apparatus to perform an operator's desired commands. Fig. 1; page 5, line 30 – page 6, line 38; page 10, lines 17-23].

12. Claims 10-11: '314 teaches the bioreactor having an air throughput to favor the bacteria [Fig. 1; page 9, lines 1-8].

13. Claims 13-14: '314 teaches a control arrangement (13, 16, 18, 21, 23, 36, 46, 51, 29, 43, and 7) controls the heat exchanger, the pump system, the valves, as well as the pump system for supplying air to the bioreactor [the control arrangement are all interconnected one way or another to run the apparatus to perform an operator's desired commands. Fig. 1; page 5, line 30 – page 6, line 38; page 10, lines 17-23].

**Claim 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over HAKANSSON (International Publication Number WO 92/16314), in view of Ripley (U.S. Patent 6,383,371), and Caroli (U.S. Patent 6,228,180) and of Hakansson (European Publication Number 0 309 432 A2) and Goodley (U.S. 6,183,643, hereafter '643).**

14. Claim 18: See claim 1 above. '314, '371, '180 and '432 are silent about a system to prevent bacteria leaving the bioreactor before entering the washing tank. '643 is a bioreactor. '643 teaches a filter system for the exiting fluid stream (fig. 1 and 3, col. 5, lines 1-10) thus removing the bacteria from the purified fluid exit stream (col. 5, lines 1-10). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to have used a filter system as taught by '643 in apparatus '314 in view of '371, '180 and '432 to have removed any bacteria from fluid exit stream before it enter the wash chamber.

***Response to Arguments***

15. Applicant's arguments filed August 26, 2009 have been fully considered but they are not persuasive.

16. Applicant is arguing that the prior art teaches away from having the cleaning liquid at one temperature and that the bioreactor is at another temperature. '314 is silent as to what the bioreactor temperature is maintained at and whether that is different from the processing liquid in the wash chamber. There is no express teaching away of operating a two temperature zone system. The art above clearly shows that the bioreactor is maintained at a temperature range of 35°C to 40°C to break down the hydrocarbons and to maintain the bacteria population and the above art clearly shows that the processing fluid in the wash chamber is at a higher temperature to emulsify the hydrocarbons. Thus is within the skill level of one of ordinary skill in the art at the time invention was made to have operated the two temperature system in apparatus '314 in view of '371, '180 and '432 thus having a temperature for reactor at range beneficial to the bacteria and a temperature of the liquid in the wash tank beneficial for clean the object.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMUEL A. WALDBAUM whose telephone number is (571)270-1860. The examiner can normally be reached on M-TR 5:45-3:15, every other F 5:45-2:15 est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 1792

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Primary Examiner, Art Unit 1792